FARM AND GARDEN

LARGE HOG HOUSE.

Provides For Maximum of Sunlight and Exclusion of Drafts.

The Illinois experiment station gives the following description of a large hog house which is in successful operation:

Sanitation.—In order to be sanitary a hog house should admit the direct rays of the sun to the floor of all the pens and exclude cold drafts in winter, be dry, free from dust, well ventilated and exclude the hot sun during the summer.

Fig. 1 shows a hog house built with this purpose in view. The building as a whole is thirty feet wide, with an

FIG. 1.—VIEW OF PART OF HOG HOUSE.

eight foot alley running lengthwise east and west with the windows on the south side. The important factor to consider in this connection is the height of the windows represented at E and D in connection with the width and manner of construction of the building. The window E is so placed that at noon of the shortest day of the year the ray of light which passes through the upper part will fall upon the floor on the south side pen on the opposite side from the window. This allows the total amount of light coming through the window at this season of the year and this time of the day to fall upon the floor within the pen. In the morning and in the afternoon, when the sun is not at its highest point, a part or all of this beam of light will pass beyond the pen. Consequently during the later winter months there will be a maximum amount of sunlight on the floor of the pen.

The lower part of the window D in the upper part of the building performs the same function for the pen on the north side of the alley as does the window E for the pen on the south side.

By this arrangement of windows there is possible a maximum amount of sunlight on the floor of the pens in winter which will serve to warm the interior of the house and especially the beds during the latter months of winter, thus making it possible to have pigs farrowed very early in the season. Sunlight not only warms and dries the building, but destroys disease germs, thus making the building both warm and sanitary. Sanitation is further augmented by the upper part of the window D, which, when open, acts as a ventilator. It is supplied with weights so that it can be opened and closed at will by the attendant while standing on the floor of the alley.

To have this arrangement of windows in the latitude above cited, it is necessary to have the top of the window E, which throws light into the pen on the south side, five feet six inches from the floor. The upper window, which throws light into the pen on the north side, is longer, but a point in this window the same distance above the lower end as the height of the window E should be nine feet eight inches from the floor. This necessitates a flat roof for the part of the building south of the alley, which must necessarily be made of some material that will shed water at a slight pitch. The wall on the north side of the building is made as high as that on the south side, but

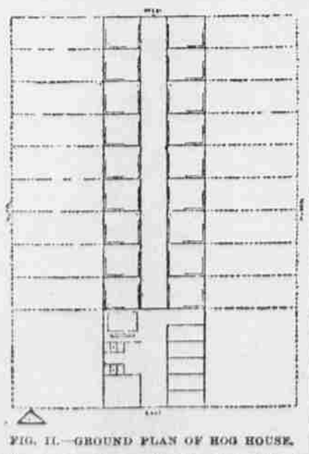


FIG. 11.—GROUND PLAN OF HOG HOUSE.

the roof on the north side and alley is made steeper so as to have more air space and good ventilation.

In Fig. 2 is submitted the ground plan of the hog house. It is 120 feet long by 30 feet wide and is provided with an alley which runs lengthwise through the middle of the building and is eight feet wide. This permits of driving through the building with a wagon, which allows the feed and bedding to be hauled in where it is needed and the manure to be loaded on the wagon directly from the pens and hauled to the field.

The pens are ten feet wide and eleven feet deep. Each pen has a doorway leading to the outside which is opened by a door sliding upward. There is also a door opening to the alley on the inside.

RESERVE EWE LAMBS.

Improve the Flock by Careful Selection of Females.

The grading up and general improvement of the breeding flock must have its ultimate source in the reservation of the ewe lambs now being reared to maturity, writes Leo C. Reynolds in National Stockman. Too much care cannot be exercised in selecting out the ewe lambs that possess the power to strengthen and permanently fix desirable qualities in the flock. Flock masters make a big mistake every season in not giving more attention to selecting their best ewe lambs.

The demand for breeding stock for starting new flocks should not induce flock masters to part with their best ewe lambs. Not in many years have I known of breeding material commanding such a high premium as now. The price offered by some anxious buyers will be a big inducement to let go some of the best ewe lambs, thinking that another year you will have some more just as good. It is right here that some shortsighted flock owner is going to fall down. The flock master who disposes of his best ewe lambs simply shuts himself out of the race of reaping a good harvest in the next few years.

Through the careful selection of ewe lambs some permanent and very desirable improvements can be effected in the flock that will in the course of a year or two return excellent profits. The demand today is for early maturing sheep—sheep that can be got to market at the earliest possible date. There are always a few ewes that show an inclination toward early maturity, and the progeny should be selected to promote this very desirable quality. Our great need today is sheep that can be fattened at any age and put upon the market when prices are the highest. This kind of animals can only be obtained by making selection from ewes that show an inclination to reproduce that particular quality.

THE POULTRY HOUSE.

Winter Quarters of Fowls Should Be Prepared For Occupancy.

It is not too soon to begin preparations for next winter, says Farm Journal. Too soon to do the work is not to be considered unless there is nothing to do. It is surprising how much one will have to do when winter comes on and he is unprepared.

The poultry house may require overhauling in various ways or a new one may be built. It will be found that a new house will be less damp if built soon enough to allow the wood to season before winter. Earth floors that have been saturated with the droppings of the fowls should be removed to the depth of six inches and fresh material used, and the roof should be carefully examined while made tight on the old house.

Another point is that it is only after one has built a poultry house and used it a year that he knows what he wants. No man ever built a poultry house that he could not see something to improve about it, and it is this experience that is assisting to get more eggs in winter. Then there are the roosts and nests.

Those who have spent hours performing the work of cleaning out the poultry houses will appreciate any labor saving contrivances, and the time to adopt them is before the winter begins.

It is suggested that the house have plenty of windows, so as to secure sunlight and warmth. Nothing is so repugnant to fowls as darkness during the day, and they will frequently remain in a storm outside rather than keep within the walls of a dark house. Begin the fall right and prepare for the winter early so as to have the hens and pullets laying before the cold weather sets in.

Rye For Pasture and Soiling.

Rye is not half appreciated by the American farmer. It is very hardy, will grow on the poorest land, makes good winter and spring pasture and if sown early enough makes good fall pasture. It is a good early spring soiling crop. It makes a fair quality of hay if cut in bloom or before, and it always sells at good prices and makes the best of bedding for cattle and horses. It is also an excellent green manure crop for turning under in early spring. While it does not add nitrogen, as the clovers do, it makes a great deal of humus, and thus improves the texture of wornout soils. It will grow in any section that can grow any of the small grains. Where corn or potatoes or cowpeas are grown after corn, rye may be sown in the corn at the time of "laying by" or may be sown on the stubble after the corn is cut and be plowed under in the spring for any of the crops mentioned.—W. J. Spillman.

Melons In the Corn Shock.

If when cutting corn you will place in one of your largest shocks about a dozen of your choicest watermelons, at Christmas, when the snow is on the ground and the frost is on the pane, you can sit by the roaring fire and eat one of your melons, which has kept all that time in the shock of corn.—Farm Journal.

Sheep Notes.

Sheep require a clean place to eat and must have it or else their health will be impaired and food wasted.

Regularity is perhaps more important in feeding sheep than is the case with other animals, for sheep are naturally regular in their habits.

While a small bunch of sheep can be kept on any farm to good advantage, they serve a double purpose, as they enrich the farm and bring a cash income at the same time.

LAUNDRY LINES.

Soaking handkerchiefs all night in strong salt water will greatly facilitate their washing.

A little salt placed in the starch will prevent it from blowing out of the clothes on a windy day.

If hooks and eyes have rusted white goods put the garment into water in which has been dissolved a little cream of tartar and boil for a few minutes.

In washing the flannels should be attended to first, then muslins and fine pieces, while towels, dusters and rougher things should be left until the last.

The value of wringing cloths well cannot be overestimated. A good laundress squeezes out the last drop of soapy water and again rinses the garment well after she has thoroughly rinsed it.

If you are doubtful whether a muslin or print dress will wash well preface the washing by soaking it for ten minutes in a pail of tepid water, into which a teaspoonful of turpentine has been stirred.

TAR IMPROVES ROADS

FINE RESULTS FROM EXPERIMENTS AT JACKSON, TENN.

Highways Thus Treated Stand Wear and Tear, Are Dustless and Beneficial to Public Health—How the Tar Is Applied.

Experiments in tar and oil for road improvement at Jackson, Tenn., are described in a bulletin issued by the United States department of agriculture.

During the spring and summer of 1905, says the bulletin, the office of public roads co-operated with Sam C. Lancaster, city engineer of Jackson and chief engineer of the Madison county good roads commission, in making a series of careful experiments to determine the value of coal tar for the improvement of macadam streets and roads. Tests were also made of the utility of crude Texas oil and several grades of its residue when applied to earth and macadam roads.

The macadam streets in the business center of Jackson were built originally of the hard siliceous rock known as

TARRING A ROAD AT JACKSON, TENN.

novaculite. About May 1, 1905, after fifteen years of wear, repair of these streets became necessary. The old surface was first swept clean with a horse sweeper so as to expose the solid pavement beneath. This was done because tar will not penetrate a road surface which is covered with dust and loose material. Next, the surface was loosened by means of spikes placed in the wheels of a ten ton steam roller, the street reshaped and new material added where needed. The road was then sprinkled, rolled, bonded and finished to form a hard, compact, even surface and allowed to dry thoroughly before either tar or oil was applied, for neither substance can penetrate a moist road surface. The best results are obtained when the work is done in hot, dry weather, and accordingly the tar was first applied in August. It may be well to add that the novaculite used in the construction of the roads is an almost nonabsorbent rock.

The tar used was a byproduct from the manufacture of coke and was practically free from moisture. It was brought to a temperature which generally reached 210 degrees F., but when placed on the road it was reduced to a temperature from 160 degrees to 190 degrees F. The hottest tar produced the best results. It was spread with hose.

Laborers, with street cleaners' brooms of bamboo fiber, followed the tank and swept the surplus tar ahead. They spread it as evenly and quickly as possible and in a layer only thick enough to cover the surface. One side of the street was finished at a time and barricades placed to keep off the traffic until the tar had had time to soak into the surface. The time allowed for this process was varied from a few hours to several days. From the results obtained it can be stated that under a hot sun, with the road surface thoroughly compact, clean and dry and with the tar heated almost to the boiling point and applied as described above, the road will absorb practically all of it in eight or ten hours. A light coat of clean sand, screenings or the clean particles swept from the surface of the road may then be spread as evenly as possible and rolled in with a steam roller.

After more than seven months, including the winter season of 1905-06, the tarred streets and roads are still in excellent condition. They are hard, smooth and resemble asphalt, except that they show a more gritty surface. The tar forms a part of the surface proper and is in perfect bond with the macadam. Sections cut from the streets show that the tar has penetrated from one to two inches, and the fine black lines seen in the interstices between the individual stones show that the mechanical bond has been re-enforced by the penetration of the tar. The tar is a matrix into which the stones of the surface are set, forming a conglomerate or concrete. A second coating applied a year after the first would require much less tar than the first, as the interstices of the rock would then be filled with tar.

A tarred street is dustless in the same sense that an asphalt street is dustless, though a fine sandy powder wears off, as in the case of asphalt. It can be swept or washed clean. These streets have since been swept regularly and the city government is in favor of treating all of the streets with tar. The cleaning that would soon ruin an ordinary macadam road does not injure the tarred surface, as the stones are not torn up or disturbed. The tar itself has antiseptic properties; hence its use would be beneficial both as a germicide and as a means of securing cleanliness.

Argument For Good Roads.

It is estimated that the summer travel of Maine annually brings into the state between $15,000,000 and $16,000,000, and it is argued that it could be increased by the addition of several millions more if improved roads were universal.

Motorists to Improve Roads.

Road improvement with the motorists themselves as the chief contributors to the road building fund is under consideration in Great Britain. The London chamber of commerce has taken the initiative in a movement to establish a central governmental highway department. This department would have jurisdiction over the trunk highways. Automobile users in England already contribute nearly $500,000 yearly in taxes, and it is desired by the chamber of commerce that this sum should be directly applied to the use of the highway department.

GOOD ROADS IN FRANCE.

How They Are Constructed and Maintained.

Coesul Brunot of St. Etienne writes of the excellent roads in France and the government method of maintaining them. He says:

"France had wretched roads in former times, and this notwithstanding the good example left by the Roman occupation. Indeed, highroad accidents were a favorite stock in trade of the old romancers. Now the roads are not only nearly perfect and good at all seasons, but are beautified by artistic stone bridges and frequently lined with fruit and shade trees. Spasmodic efforts were made to better the roads, mostly around Paris, under Louis XIV. (1643-1715), but it was not until about 1775 that the serious work of building great roads of national extent was undertaken, and Napoleon I. carried it forward vigorously as a part of his military schemes, uniting frontier points with the capital. Never has the work ceased, except during periods of war, and the more difficult sections, at first left to a more convenient season, are steadily being built, while new cutoffs and connecting links are continually being declared open for service. The roads are divided into six classes, as follows:

"First.—National roads, built and maintained by the government, 21,300 miles.

"Second.—Departmental (state) roads, built and maintained by the political divisions traversed by them, 15,700 miles.

"Third.—Principal local roads, traversing two or more townships (communes), are maintained by them with government aid, 124,000 miles.

"Fourth.—Secondary local roads, the same as the preceding, except that they are of less importance and are maintained by the townships under supervision by the government, 150,000 miles.

"Fifth.—Minor local roads, still less important than the foregoing and maintained by the townships under the supervision of goverument engineers.

"Sixth.—Rural roads, lanes of small importance entirely maintained by the townships without any intervention or supervision by the government.

"The rules for grades are—national roads, 3 per cent; departmental roads, 4 per cent; principal and secondary local roads, 5 per cent, which is the maximum allowed, except in extremely mountainous regions or on the most difficult sections of the less important roads, where there is too little traffic to warrant the expense of reducing the grade to within the rule. The method of construction formerly was to grade the bed level and lay a stone dressing of a depth of 17½ inches in the middle, diminishing to 14 inches at the sides, but experience proved that a better plan was to give the earth bed the same rounded form intended for the surface, and the thickness of the stone layer was reduced to 11½ inches. This is the method now generally followed, and about 8,700 miles of the most recent construction have been built on this plan, the others being macadam roads, built of material found on the spot, and some minor roads of gravel and earth."

King Drag Work on Roads.

The influence of the D. Ward King road meeting March 31 at Erie, Kan., has already extended to every township in Neosho county, says the Thames City Times. Taxes for road purposes in all the townships were made payable in cash this year, and the township boards are appropriating the funds for the building and operation of split log drags. Fifteen drags are now at work in Erie township under the direction of the trustee, and, in addition to this number, many farmers have built drags for private use. The street commissioner of the city has been using several split log drags on the unpaved streets of the town, and these streets are now quite as smooth and hard as those that were paved. Farmers are enthusiastic over the results obtained on the country roads, and plans are being made for dragging every mile of dirt road in the county this spring.

Philippine Roads.

Reports from the Philippines inform us that the conversion of impassable trails into good highways is proceeding rapidly, and the work is being done by native convicts in charge of white officers, says Motor News. The lack of ordinarily decent roads has been one of the most serious drawbacks to development of our island possessions in that it was impossible to transport products from the interior at anywhere near a figure which left a fair profit to those who handled the stuff at the coast. Present information leads us to believe that the farsighted policy now being followed is to be continued, with the result, perhaps, that the Philippines will possess a network of splendid highways long before such results are reached in the United States.

The Enormous Mud Tax.

In the course of a speech Congressman John H. Bankhead of Alabama declared that "the amount of money it takes to haul a ton five miles on our dirt roads will pay the freight for 250 miles on a railroad or 500 miles on a river and 1,000 miles on the lakes. These figures prove conclusively the enormous tax levied by the bad roads on the farmers and how much of their legitimate profit is consumed in hauling from the farms to the railroad stations, river landing and to the towns and cities. Not only have the farmers suffered great loss on account of poor roads, but the people in the towns and cities who depend upon them for their supplies have suffered also."

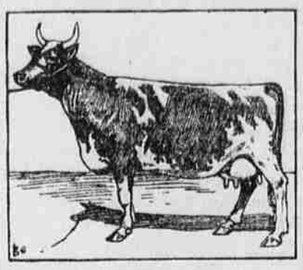
Crushed Velvet.

The following way of restoring the pile of velvet is said to be excellent: If it is only slightly crushed treat it in the same way crape is treated—by steaming it on the right side until heated through. If very much crushed wet it on the underside, let some one hold a hot iron bottom side upward and pass the wet side of the velvet slowly over the flat surface. When the steam rises thickly through the right side it will raise the pile with it. Dry without handling.

IN THE DAIRY

Ayrshire breeders for the last fifty years or more have been handicapped in breeding because the standard of excellence has lacked uniformity between the three great breeding sections for Ayrshire cattle, Scotland, Canada and the States. The outlook for the future seems much more hopeful, for all three have practically united on one common scale of points as the standard of excellence, and in future there should be no wide difference between Ayrshires of the different sections. If Ayrshires are to be kept as one breed and one general family, there must be more attention paid to breeding after the pattern as laid down by the different associations, and these associations have united on a common standard. There is no reason why breeders may not in all the different countries work in unison to a given standard, said a speaker at the New England Ayrshire club meeting.

The strongest point of the Ayrshire cow, around which cluster all the other points, are the udder and teats, and this is the same in all countries under the recent revision—a large, square udder with four quarters of equal capacity, held strongly up on the belly, running well forward and behind, up out of the



AYRSHIRE COW.

way of dirt and injury; four good sized teats wide apart on the four corners of the udder, in length from two and a half inches to three and a half inches, hanging perpendicularly.

It needs no argument to show that, other things being equal, a cow with the above udder and teats is perfection, and if breeders of Ayrshires would all aim to produce this style of udder on their cows it would in itself cover a multitude of imperfections in other parts of the body. The Ayrshire cow here reproduced from Hoard's Dairyman is owned by Barclay farm, Bryn Mawr, Pa. This cow entered the advanced registry this year and gave 1,155 pounds of milk, 525 pounds of butter in one year.

The Separator In Missouri.

The hand cream separator is a very potent factor in Missouri dairying. It came slowly at first, but of late very rapidly. It has come to stay and has brought additional prosperity with it. Any man with ten ordinary cows who is where he can patronize a creamery, either centralized or local, cannot afford to be without one. The extra cream saved in one year over the deep can or crock system will usually pay for the machine, and the machine if treated decently will last for ten or fifteen years. There are half a dozen makes of separators on the market. Competition has forced them all to become good and stay good. The farm separator is now to the dairy farmer what the twine binder is to the grain farmer. It is possible to cut grain with a cradle, but it would not pay to do it in that way. The milk producer can make some money in the old way of raising cream, but it does not pay.—R. M. Washburn in Kimball's Dairy Farmer.

The Profitable Cow.

Always have the barn and fastenings arranged so that the cow will be comfortable, as the comfortable cow is the profitable cow.

Feeding Milk Cattle

Root crops cost more to produce than corn ensilage, but are more convenient for a small herd. The cows like carrots best and do not tire of rations of roots if mixed with carrots, says a Pennsylvania farmer in American Cultivator.

Foods That Taint Milk.

The feed should be good and free from aromatic substances. If these aromatic foods are used they should be employed according to those methods which will not cause odors or flavors in the milk.

Look to the Pasture.

The all round food for milk cows is grass. Therefore look well to the pastures and see that their quality is improved.

Study the Cow's Needs.

Each individual in the herd should be studied and given the care that she requires for best production, says Farm Journal.

Two sisters stood side by side in a herd. One required bulky, light food to cause her to do her best. The other required more concentrated food with less bulk.

No herd of cows can ever be really profitable unless they receive just this careful attention.

Grind the Hay and Stover.

Alfalfa meal is a standard commodity on the feed market, yet I see but little in print as to the results of feeding it, but the few dairymen, says L. W. Lighty in National Stockman, I heard speaking about the experience they had with it seemed very favorable. A prominent Pennsylvania dairyman a few days ago told me he is about putting in grinding machinery that will handle the timothy and mixed hay and reduce them to a fine ground, crushed condition. Who ever tried this practically? Is there any available information in the experiment station reports? I would not like to commit myself, but it seems to me theoretically that we could do the rougher part of the chewing cheaper with gasoline or alcohol power than with cow power. It has been amply demonstrated that feeding the cow easily digested feed saves feed.

SUCCESS IN DAIRYING.

If In the Small Leaks That Cause the Failures.

Little leaks in the dairy are the cause of every failure in the dairy. The man who ruins his business by some wild venture can justly lay all the blame to a spirit of gambling. He has got the disease called "get rich quick," which has been the ruin of thousands in this money made age and has nothing to do with the business he is regularly following. When it comes to a lifelong occupation like that of dairying we must make preparation for stopping all the leaks we can and thus add to the profit of our work.

The trouble with most of us is that we overlook, don't see, these small leaks that make such a large total when added up at the end of the season's work, says Home and Farm. To begin with, most of our dairymen are not equipped for detecting these leaks. For instance, one has often heard that hay cut when too old has lost a considerable portion of its feeding nutriment—that is, when the horses or cows eat it they do not get as much benefit from it as if it had been cut several days sooner.

But the farmer answers it is much harder to cure it in a half ripe stage, with risk of loss from rain, and, again, if he sells it he gets more because it weighs more. This first excuse is no excuse at all, for without trouble you cannot make money. It is this dodging trouble that keeps many, if not most, farmers poor all their lives. If you have to feed your hay on the farm, then in order to get the greatest income from it you should have it in the very best condition, and the only way to do that is to take more trouble with it, put it up in smaller cocks, so it will cure more rapidly, work a little harder and faster to avoid the rain, and you many times save a great deal more money in the outcome of the crop.

Milk Easily Tainted.

A dirty tin bucket will injure the quality of the milk and affect injuriously the butter made from that milk, no matter how carefully the work is done subsequently.

Do not let dirt get into it and keep it cold enough to make good butter, and then you have mastered the situation. One thing about the milk room—have the floor on the ground and made of cement, for you are sure to spill more or less milk or cream that will spoil and taint the air of the room, but if the floor is made of cement and you wipe it up before it dries no damage is done. If the floor is wood you cannot wipe or wash the oil out of the wood, though painting it will help.

If you have been in the habit of marketing your butter in long rolls or packed in jars or cans, you will be astonished how much better it will sell if you make it into pretty prints wrapped in parchment paper. It will on an average sell for 5 cents more a pound and sell faster if made to suit the fancy of the buyer. The grocer likes to handle pretty looking pats and will recommend it before a better article, for he knows how lady buyers judge by the looks of things rather than the taste.

Have your own stamp, so that those who like the butter will know how to tell it when they come for more; then it looks as if you were ready to guarantee the article and were therefore sure it was good.

Care of the Cow's Teats.

The care of the teats should always be observed by the milker and when they get hard and rough should be anointed with vaseline, as cracked teats are an annoyance to the milker, hurtful to the cow and have a tendency to lessen the flow of milk. Long finger nails are also a discomfiture to the cow, and the milker should keep them well pared to avoid trouble.

Some cows will not give down their milk for some milkers as readily as to others, and it is often necessary to change milkers and try to find one whom the cow takes a liking to and for whom she will give it down. The holding up of the milk has a tendency to lessen the secretion and consequently the flow.

Grow Feed on the Farm.

The Massachusetts state crop report contains an article by Professor F. S. Cooley on "Some Causes Affecting the Profits of Dairying." On the subject of feeding dairy cattle the professor urges that feeds be produced on the farm as far as possible. Usually the best practice is to purchase only feeds rich in protein and raise the coarse fodders on the farm. Cows fed on starvation rations yield no profit, and those overfed with expensive feeds are also kept at a loss. The point of highest profit in feed must be determined by experiment and calculation and varies with the locality and circumstances of the feeder.

Improving the Herd.

Select as far as possible females which conform to the standard of excellence of the breed. If this is accomplished it will insure a uniformity in type that is highly desirable. If in addition to this it is possible to select cows and heifers that are similarly bred they will be more likely to produce uniformity in their offspring.

DRESS HINTS.

Simplicity of taste in dress is good taste.

In basting the skirt band to the skirt hold the skirt toward you and take care to match the center of the skirt to the center of the belt.

Plush goods and all articles dyed with aniline colors which have faded from exposure to the light will look as bright as new after sponging with chloroform.

A mixture of alcohol, one part, and water, three parts, wonderfully freshens black dresses and suits. They should be sponged all over on the right side, then pressed on the wrong side, while still damp.

It may seem superfluous to mention so simple a matter, yet not all dressmakers or professional seamstresses appreciate the importance of putting patches on with the twill or nap of the goods going the same way in patch and goods matched.

THE PLAIN GIRL.

A Course of Treatment That Made Her Quite Attractive.

The plain girl was "tired to death" of being mentioned as "that plain girl over there" and looked long and scrutinizingly at her figure one day in the glass. After this scrutinizing process she determined to kill the faults of "plain Mary Brown." First of all she began some exercises for rounding out her figure. The one she used most frequently was this:

Stand erect, with the head held easily, arms at the side. Taking in a full breath very slowly, lift the arms shoulder high, at the same time rising on the toes. Now bend the knees very slowly, keeping the body in a well poised position, then rise very slowly, still on the toes. Then sink back to position.

This exercise she found developed a habit of walking, standing, sitting and rising correctly, straightened the shoulders and rounded out the hollows. Bending the knees did away with the stiffness, and with that the awkwardness disappeared.

Her face, neck and arms she bathed in very hot water every night, rubbed in a good cold cream and rubbed out every suggestion of a line or wrinkle. In the morning she washed her face with hot water, making a lather of soap on her hands, not touching a cloth to her skin. This was followed by a good dashing of clear hot water and that in turn by a vigorous spatting with the fingers dipped in cold water, says Woman's Life.

She practiced smiling to make the corners of her mouth turn up, and soon she found the forced smile had become a natural one; that the contented spirit within generated by the "smiling habit" was beginning to show itself in a happy expression, brightened eyes and an utter routing of all the old lines that erstwhile marked her face.

THE NURSERY.

Care of the Room Devoted to the Use of the Children.

Never sweep the nursery with an ordinary broom, as it raises too much dust. A soft hair broom should be used or else a flannel bag put over the regular broom. At least every other day the rugs should be taken up and shaken outdoors and the floor wiped up with a damp cloth, adding a few drops of carbolic acid or some other mild disinfectant to the water in which the cloth is damped.

Never under any circumstances use a feather duster in the nursery. All the furniture, woodwork and pictures should be dusted every day with a damp cloth, being careful to dust behind the pictures as well as the other parts. Every week or two dust down the walls with a damp cloth tied on to a broom. Cover the crib and bed with a large sheet when the room is swept and remove all the lighter pieces of furniture after they have been wiped off while the room is being cleaned.

At least twice a day, even in the coldest weather, the nursery windows should be opened both top and bottom for fully half an hour and the room fairly flooded with fresh air and sunshine also if you can get it.—New York Mail.

PHENOMENA OF HABIT.

The Importance of Correct Training For Young Children.

The most important years, the years that give the trend for life, are the early ones, when the little dimpled hands are outstretched, when the baby soul is reaching forth and receiving ideas and impressions, when manners are formed and habits have their beginnings. To leave the babies to irresponsible hired hands and lavish care and expense on half grown children is the blunder of those who are ignorant or inexperienced as to vital issues.

President King of Oberlin college, in his admirable treatise on "Rational Living," has this to say to young people, and I commend it to mothers:

"Nowhere are the psychical and physical so completely interwoven as in the phenomena of habit. The mind's initiative constantly comes in, but it is as constantly seconded by the nervous system. The time limit in habits is one of the strong evidences of the close connection of body and mind. It is a startling fact to face that a man's personal habits are largely fixed before he is twenty, the chief lines of his future growth and acquaintance before he is twenty-five and his professional habits before he is thirty. We are becoming bundles of habits. With every young person one must, therefore, continually urge: Are you willing to retain just the personal habits you have now? You cannot too quickly change them if you wish to make thorough work. From your early morning toilet, through the care of your clothing and the order of your room, table manners, breathing, tone of voice, manner of talking, pronunciation, gesture, motion, address, study, to your very way of sleeping at night—all your habits are setting like plaster of paris."—Margaret E. Sangster in Woman's Home Companion.

The Right Kind of a Girl.

Let a girl be ever so graceful in the dance, let her be ever so elegant of walk across a drawing room, ever so right in conversation, she must possess some other qualities to convince the great average run of young men that she can be a manager of his home. Frugality, woman instincts of love for home, an eye to the best interests of her husband and the careful training of her children—these are the traits which make the good wife of today and which young men look for in the girls they meet, says Woman's Life. Men may sometimes give the impression that they do not care for common sense in their sweethearts, but there is nothing they so unfailingly demand of their wives.

The Salamander.

Some housewives may not know what the salamander used in cooking is. It is a circular iron plate, to which is attached a long handle. When any article of food is to be browned the salamander is made red hot in the fire and then held over the article. An ordinary fire shovel may be used instead of a salamander, but it is not especially good for the shovel to be heated so intensely.